



Fish and Fish Habitat

March 12, 2019

Fish and Fish Habitat

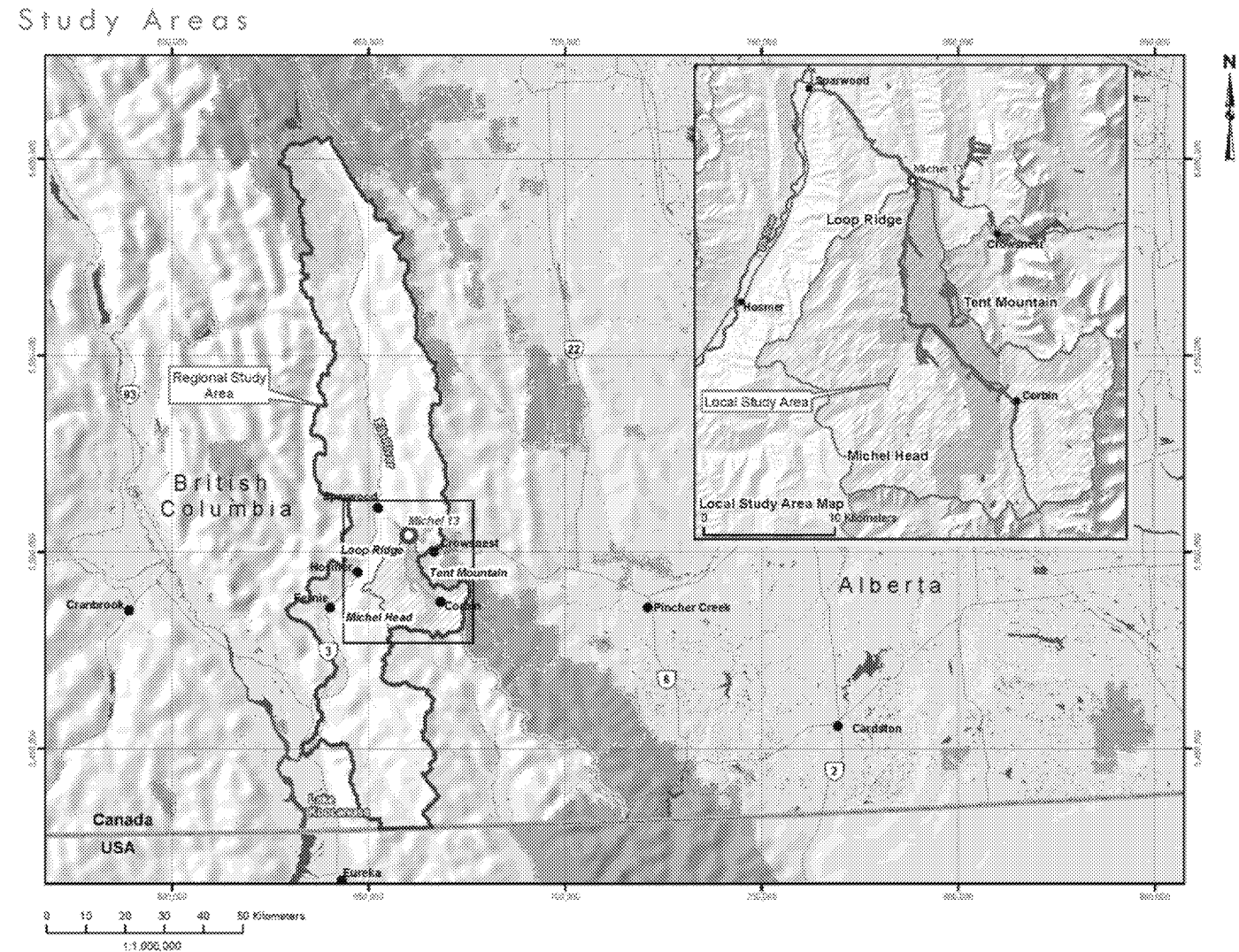
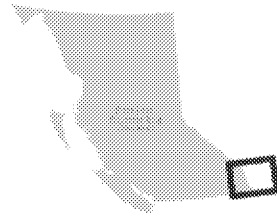
Outline

- Study areas
- Valued Components
- Baseline assessment overview



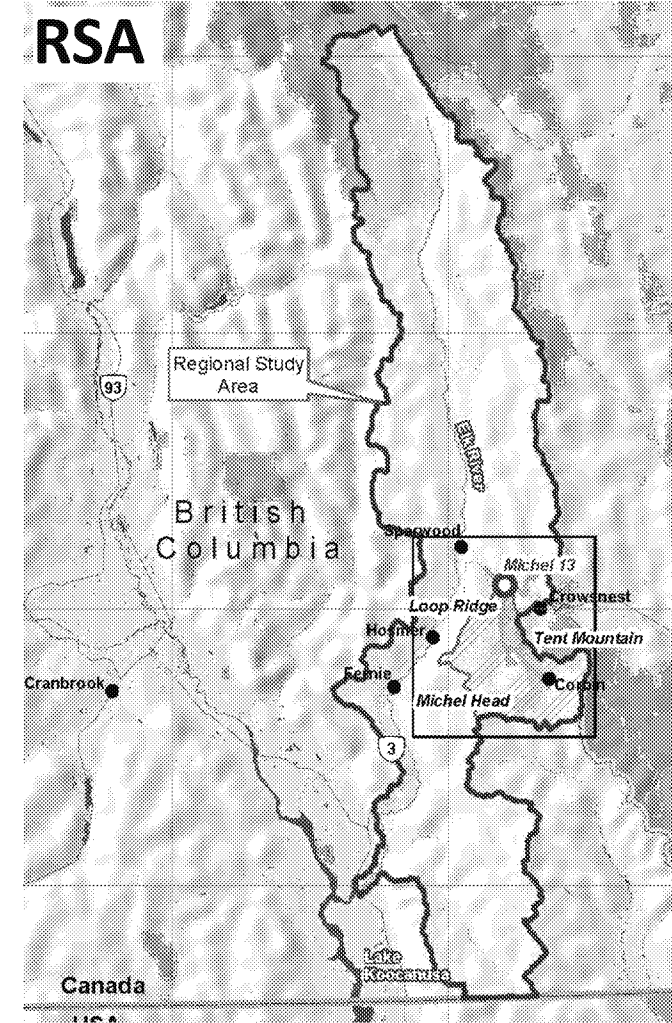
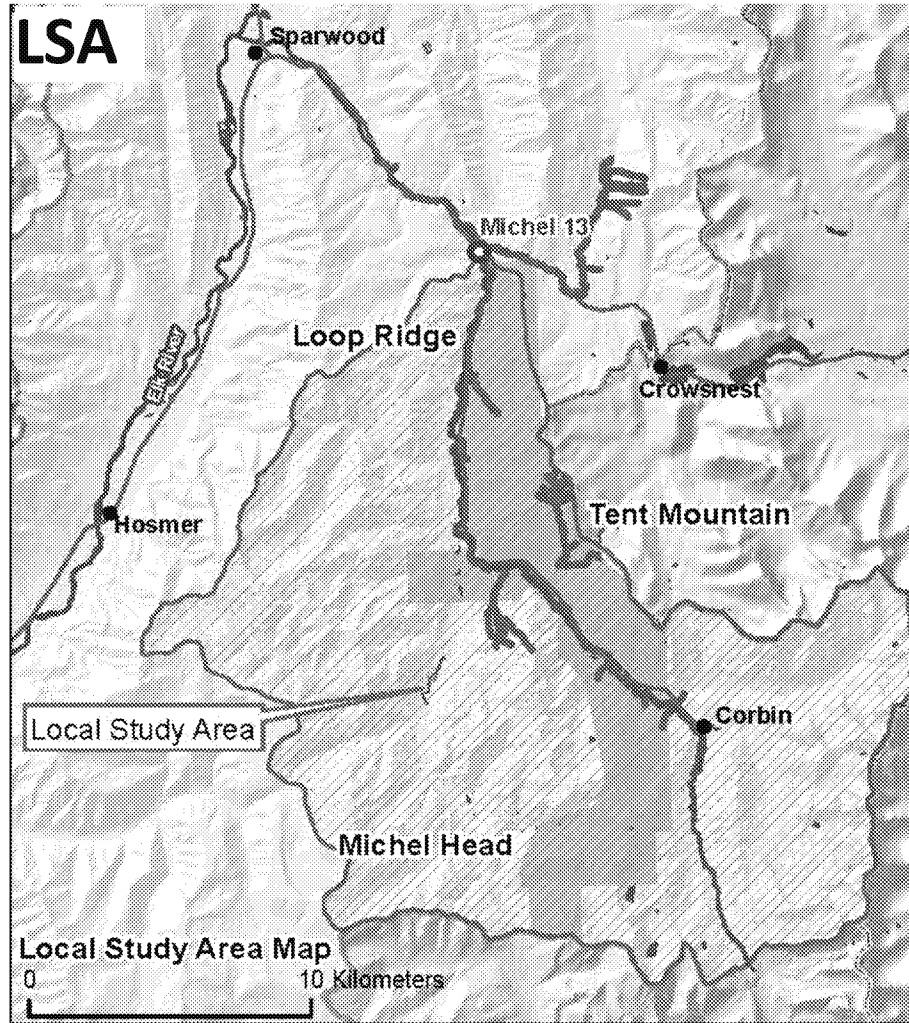
Fish and Fish Habitat

- LSA – Michel Creek watershed upstream of Alexander Creek
- RSA – Elk River watershed



Fish and Fish Habitat

Study Areas



Fish and Fish Habitat

Valued Components

- Candidate VC's list
- Screening
 - Be present in the Project area;
 - Potentially interact with the Project;
 - Be required by legislation;
 - Be relevant to government priorities;
 - Be relevant to indigenous interests, including rights and title;
 - Have the potential for cumulative effects;
 - Be sensitive or vulnerable to disturbance; and
 - Be measurable directly or by another VC.



Fish and Fish Habitat

Valued Components

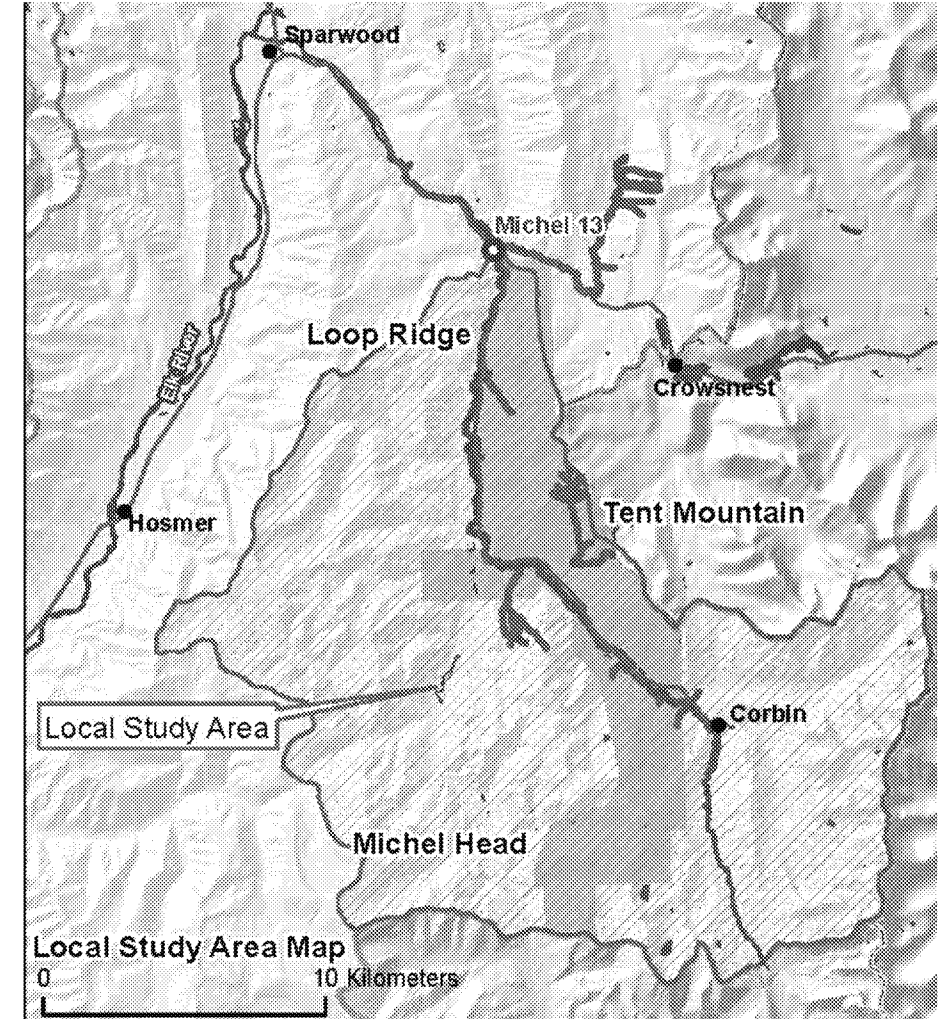
- Fish and Fish Habitat VC's
 - Benthic Invertebrates
 - Fish and fish habitat –subcomponents
 - Westslope cutthroat trout (*Oncorhynchus clarkii lewis*)
 - Bull trout (*Salvelinus confluentus*)
 - Longnose sucker (*Catostomus catostomus*)
 - Mountain whitefish (*Prosopium williamsoni*)



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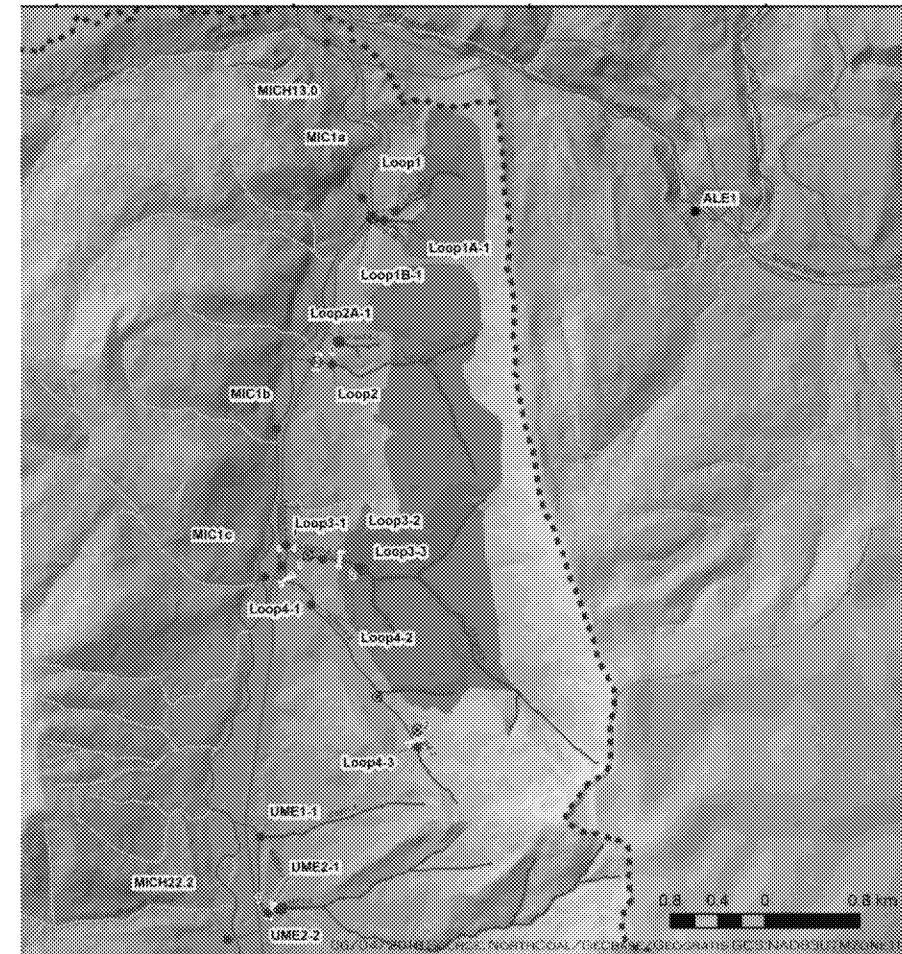
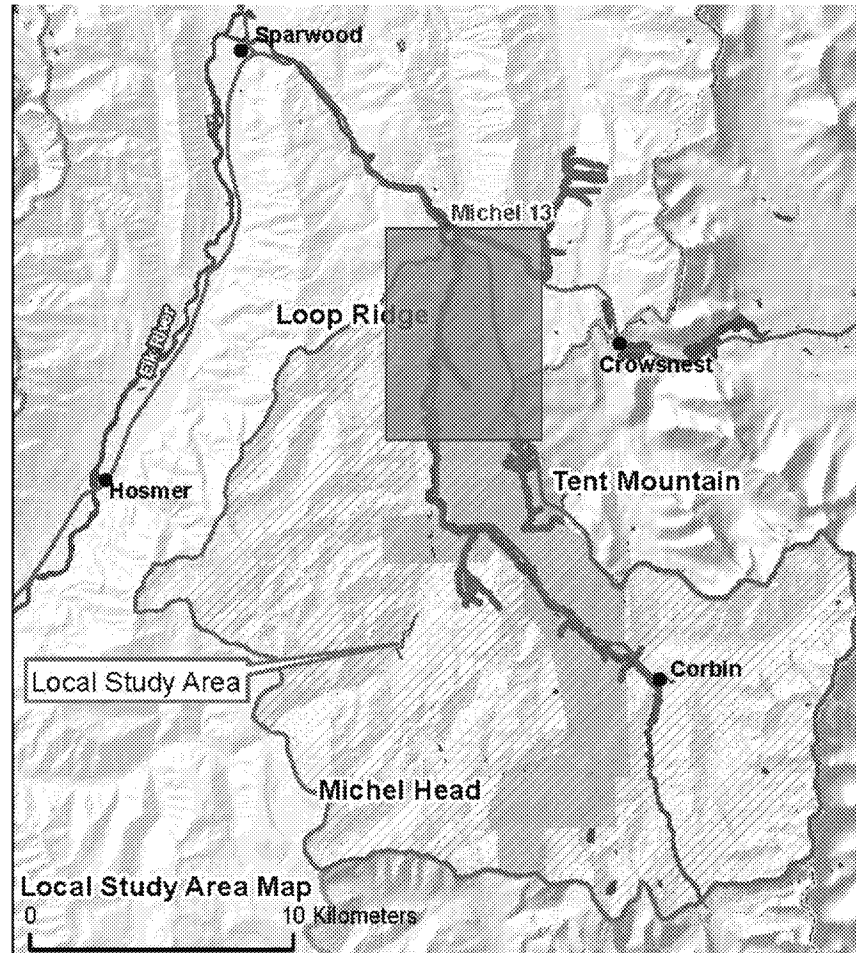
Baseline Assessment Overview

- Presently 42 stations
- LSA reference site = Andy Good Creek
- RSA reference site = Alexander Creek



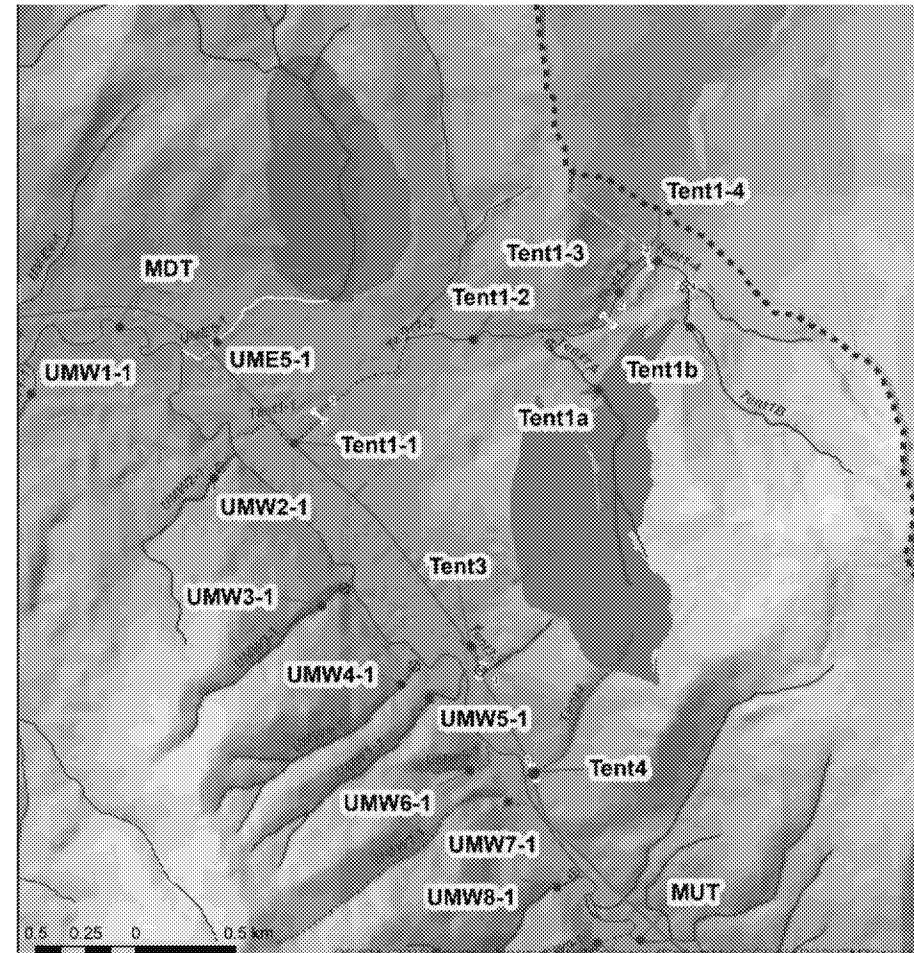
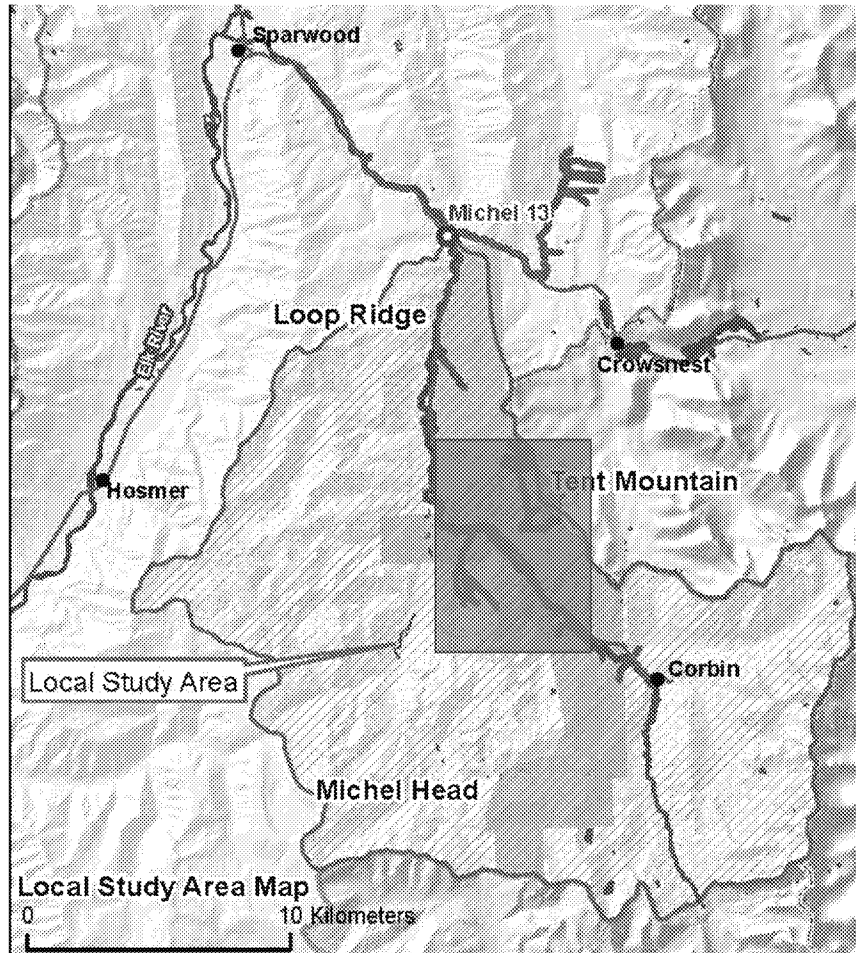
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Baseline Assessment Overview



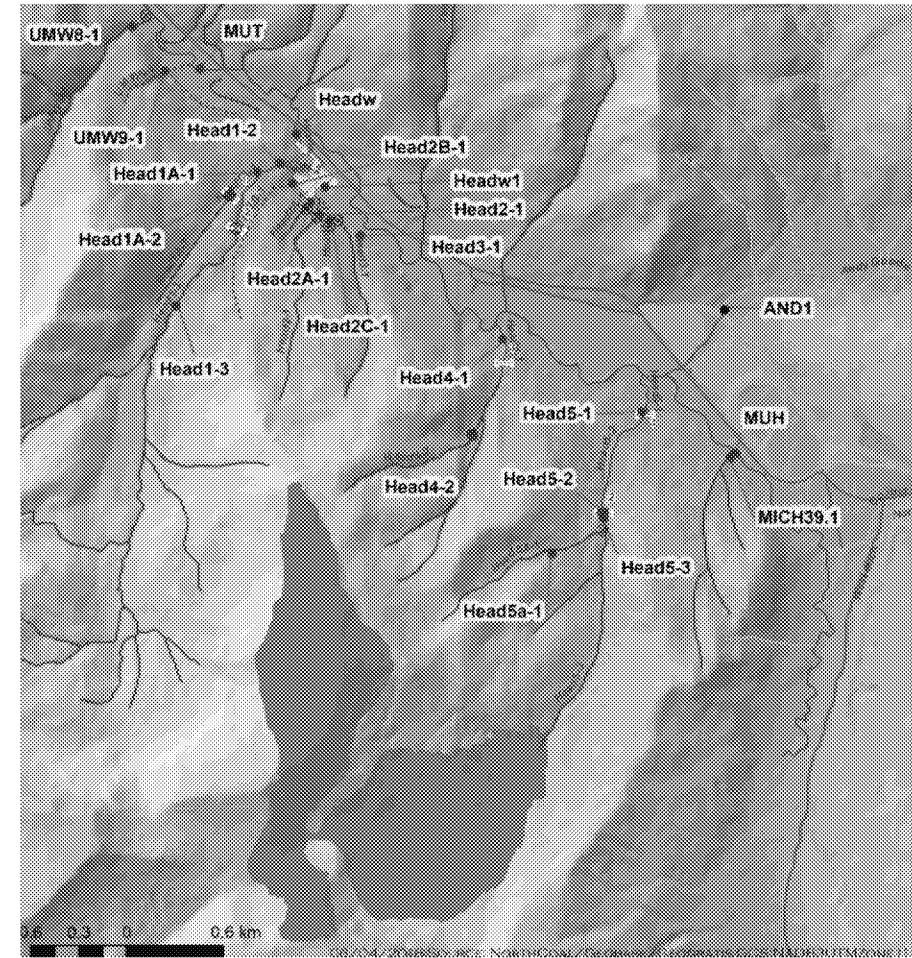
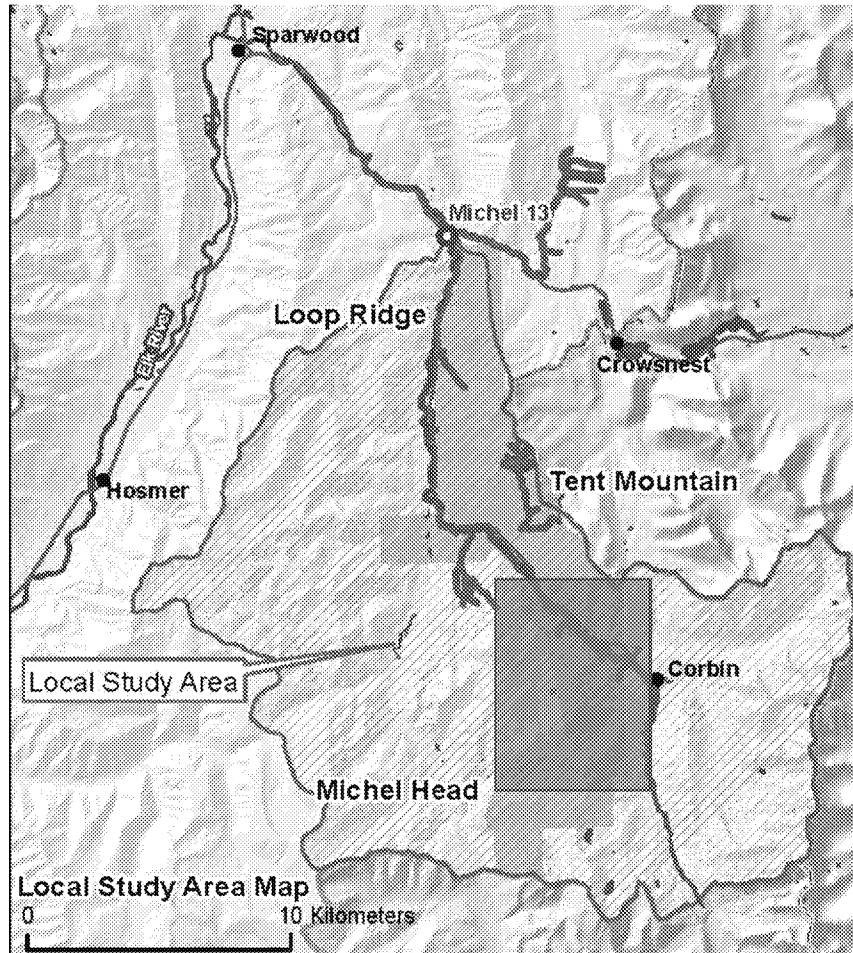
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Baseline Assessment Overview



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Baseline Assessment Overview



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Baseline Assessment Overview

- Fish distribution
 - 10.9 km (17.3%) fish bearing
 - 52.3 km (82.7%) non-fish bearing
- Use by species
 - WCT + EB most abundant
 - BT rare, some tributary use
 - LSU wetlands/off-channel habitat only
 - MW mainstems only



Fish and Fish Habitat

Baseline Assessment Overview

- Loop – EB dominated
- Tent Mtn – Only WCT
- Michel Head – EB low gradients (e.g., wetland), WCT steeper sections
- Overwintering
 - Loop 3 and 4 (lower)
 - Michel Head wetland
 - Limited mainstream use
- Summer water temperature
 - Tributary refugia





THANK YOU

